DOCUMENT RESUME

ED 439 503 EA 030 311

TITLE	High Schools in the Hot Seat: An Overview of Current Challenges. EdSource Report.
INSTITUTION	EdSource, Inc., Palo Alto, CA.
PUB DATE	1999-06-00
NOTE	21p.
AVAILABLE FROM	EdSource, 4151 Middlefield Rd., Suite 100, Palo Alto, CA 94303-4743. Tel: 650-857-9604; Fax: 650-857-9618; e-mail: edsource@edsource.org; Web site: http://www.edsource.org.
PUB TYPE	Reports - Descriptive (141)
EDRS PRICE	MF01/PC01 Plus Postage.
DESCRIPTORS	Academic Standards; *Educational Assessment; Educational Change; Educational Environment; *High Schools; *Needs Assessment; Student Characteristics; Students
IDENTIFIERS	California

ABSTRACT

This report takes a broad look at the status of California's high schools. It examines the demands being placed on schools, new systems for accountability, available data on the performance of students and schools, and the resources high schools currently devote to helping students achieve. The text focuses on the various factors that influence curriculum and requirements, such as how college admissions drive high-school course offerings and the emphasis that industry places on school-to-career pathways. It discusses how student-achievement and school-accountability measures are changing, how low-achieving students have faced few consequences, how California is raising the bar on high-school graduation, and how school evaluation has depended on self-study processes. The article outlines the key elements of California's new school-accountability system and how the state currently measures student and school performance. It details how college-preparation data are revealing positive trends in student achievement and reports that more students are aiming for college. It assesses the kinds of students in the system and states that high schools lack qualified staff. The document concludes that schools must be made safe, that they must offer afterschool programs, and that funding adequacy is a key concern. (RJM)

Reproductions supplied by EDRS are the best that can be made
from the original document.

REPORT

June 1999

ED 439 503

EdSource.

Clarifying Complex Education Issues

An Overview of Current Challenges

High Schools in the Hot Seat

Colleges, employers, policy makers, and parents are asking high schools to increase accountability and improve student achievement. What is realistic to expect, given available resources? This report looks at the tensions between conflicting expectations, changing accountability measures, insufficient assessment data, and the capacity of high schools to perform.

EdSource thanks the Walter S. Johnson Foundation for its investment in our work.

In California today, high schools are at the center of escalating concerns about public education. They are getting heat from all sides, and the pressures are mounting — pressures that include:

- a new state high school exit exam required for graduation
- a new state accountability system for schools
- a transition to a standards-based approach to education
- a push by state leaders for greater state control over what gets taught
- private industry efforts to influence the workplace skills graduates have
- higher education concerns about the academic skills graduates lack
- shortages of qualified teachers and administrators
- students entering high school unprepared for rigorous academic work
- the need to motivate students who are more and more disengaged
- increasingly uninvolved parents as students get older
- more worries about safety on high school campuses
- the lack of adequate financial and other resources

For many of the students, educators, and parents involved in high school every day, many of these pressures are on the periphery. More pressing is the need to make sure the institution serves their own individual needs. And sometimes the turmoil that comes with change seems much more troubling than the status quo — even when that status quo falls short of their expectations.

As the scrutiny of high schools increases — and pressures mount — looking at how these various dynamics interact is instructive. How can Californians prioritize the multiple demands being placed on high schools? What is really known about how well the state's high schools and students are doing? And perhaps most problematic of all — what resources must high schools have in place in order to make the kinds of improvements politicians, business leaders, and the public are demanding?

This report takes a broad look at the status of California's high schools. It examines the demands being placed on schools; new systems for accountability; available data on the performance of students and schools; and the resources high schools currently have available for helping students achieve.

INSIDE THIS REPORT

Requirements and expectations	2
Measuring student and school performance	8
Capacity and resources	15
The heat is on for high schools	20

© Copyright 1999 by EdSource, Inc.

EA030311

BEST COPY AVAILABLE

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
☑ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

J. Carey

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

Trish Williams
EdSource Executive Director

1998-99 EdSource Board of Directors

Sherry Loofbourrow, President
Former President, California School Boards Association

William Moore, Vice President
Vice Chairman of the Board, California Casualty Group

Gail Dryden, Secretary
Special Projects Director, League of Women Voters of California

Gerald C. Hayward, Fiscal Officer
Director, Policy Analysis for California Education

William Chavez
President, Strategic Education Services

Carl A. Cohn
Superintendent, Long Beach Unified School District

Deborah Daniels-Smith
Director, SUCCESS - California Student Opportunity and Access Program

George Datz
Chairperson, Educational Congress of California

Eugene Garcia
Dean, Graduate School of Education, UC Berkeley

Karyn Gill
President, League of Women Voters of California

Robert G. Haskell
Senior Vice President, Public Affairs, Pacific Life Insurance Company

Donnell Jordan
Teacher, Desert Sands Unified School District

Kelvin K. Lee
Superintendent, Dry Creek Joint Elementary School District

MaryAnn Memmer
Vice President for Education, California State PTA

John Mockler
President, John Mockler & Associates, Inc.

Peter Schrag
Contributing Editor, Sacramento Bee

Rosaline Turnbull
President, California State PTA

Krys Wulff
President, American Association of University Women - California

Requirements and expectations

In California today high school communities are navigating through a maze of shifting state requirements and expectations. From basic curriculum content to the school accreditation system, school leaders, parents, and students face change at every turn. And the state's newly approved high-stakes accountability systems for both students and schools make the need to adapt quite clear.

Less clear are the precise goals and priorities, who has the power to set them, and who can and should be held responsible for meeting them. California today is in the midst of an on-going and often contentious process of addressing those crucial questions.

Various factors influence course offerings and requirements

To understand the scope and potential impact of the changes on the immediate horizon for high schools, it is important to also look at where they have been. Local control over high school curriculum has had a long history in California and in some communities has been jealously guarded.

At the same time, university admission has traditionally been a measure of high school effectiveness and schools have focused their programs for college-bound students accordingly. New demands that all students have access to the college preparatory curriculum — combined with business concerns about inadequate workforce preparation — are adding force to the call for a stronger state influence over what schools teach.

Local districts control high school graduation requirements within state guidelines

In order to earn a diploma from a California high school in 1999, students must pass a basic skills proficiency test and meet the minimum graduation requirements as determined by their local school district. The district, in turn, has to make sure students take the minimum number of courses set by state law (see the box on graduation requirements on page 4). The state initiated these graduation requirements in 1983 with the passage of SB 813, an omnibus reform measure which placed a great deal of focus on high schools and what they taught.

Despite much "guidance" from the state, districts up to now have had final control over their curricula. They have not been legally mandated to satisfy state-determined standards for the quality of the courses they offered or for what students learned. Within the mandatory subject areas, the classes a student took could be as rigorous as the local school district decided to make them. In addition, local districts had discretion over the tests they used to measure proficiency and the level of student performance they defined as "proficient."

But even while the final say on these things has historically been in local hands, the state has for years used curriculum frameworks, the high school accreditation process, statewide testing, and other methods to try to influence local decisions. The state's leverage has been steadily increasing. In 1997 and 1998, the California State Board of Education adopted "voluntary" academic content standards to provide further guidance to school districts. California's new high school exit exam puts more teeth into state leaders' desires to create uniform expectations for student performance.

College admissions drive high school course offerings

There is no doubt that college admission requirements have a strong influence over what high schools teach, what they expect of students, and how they approach school reform. Many argue that, in some high schools, college admissions are a stronger driver of local decisions than other state policies because the stakes involved are so tangible for high school educators, parents, and students.

The first step for a high school student wanting to go directly into either of the state's public university systems — the University of California (UC) or the California State University (CSU) — is the completion of specific high school course work. These are generally referred to as the "a-f requirements." (See the box on graduation requirements on page 4.) The state's university systems determine the high school courses that qualify incoming freshmen for eligibility, but local districts decide specific course content and expectations for student performance. In addition, students must pass each class with a "C" or better in order to have it count.

Two decades ago, UC and CSU differed in the coursework they required for eligibility. However, the two systems have been aligning their course requirements in recent years. By the 2002-2003 school year they are expected to be

A PROFILE OF CALIFORNIA'S HIGH SCHOOLS

STATEWIDE DATA — 1997-98 school year (most current available)

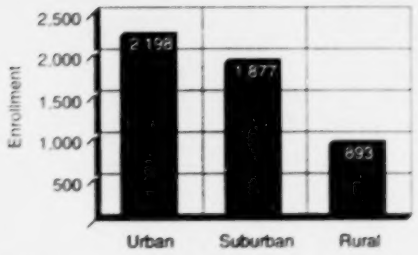
Total number of public high school students — 1.6 million

Total number of public high schools — 860

Most common configuration — four-year, grades 9-12 (serves over 90% of high school students)

Average school size (1996-97) — 1,655 students. This masks vast differences, from fewer than ten students in some mountain communities to 5,187 at Roosevelt Senior High School in Los Angeles Unified School District.

Average school size by community type



Average class size in high school — 29.0

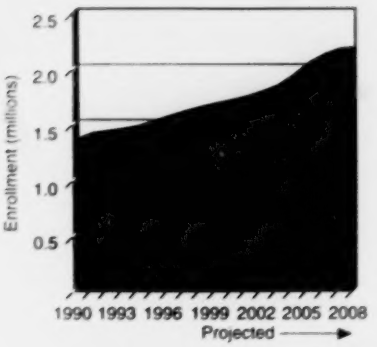
Statewide (K-12) average 27.2, middle school (6-8) average 29.4, and elementary (K-5) average 26.1

High schools offering Advanced Placement (AP) courses — 70%

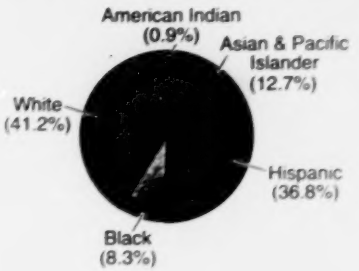
THE STUDENTS THEY SERVE — 1997-98 school year

High school enrollment growth — 11% between 1994-95 and 1997-98, compared to 6% in K-8.

Similar growth in high schools is projected through 2008



Ethnicity of California's high school students (grades 9-12)



High school students who qualify for free/reduced price meals (1996-97) — 30.4%

High school students designated as Limited English Proficient (LEP, 1996-97) — 16.1%

SOME SPECIAL SITUATIONS

A little less than 10% of all high school students, about 156,000, attend school in continuation and alternative schools; juvenile court schools; and community schools (1996-97). This includes the 27,730 young people who are in the custody of the California Youth Authority or assigned to county-run juvenile hall/community schools.

36 high schools (less than 4%) are on year-round calendars.

Of California's 155 operating charter schools (as of April 1999), 68 serve high school age students but just 20 serve exclusively grades 9-12.

210 private high schools serve grades 9-12. Private school students in grades 9-12 total 133,918, or about 8% of all California high school students. The proportion of children attending private schools is higher in grades K-8, with kindergarten being the highest.

High School-only Districts are an unusual configuration

California is one of only two states that have elementary and high school districts. With the exception of Illinois, every other state in the U.S. has only unified K-12 school districts.

About one-third of California's high school students attend in school districts that serve grades 9 through 12. The state has 99 such districts which operate a total of 270 schools. They are predominantly in suburban (46%) and rural (33%) communities.

Data: California Department of Education

EdSource 6/99

identical. Students must achieve quite different levels of performance, however, to get into the specific school they want. Both UC and CSU use eligibility indexes — made up of a student's grade-point average and score on college entrance examinations such as the SAT — to set minimum acceptable performance levels for their respective systems. Students who meet these requirements are guaranteed admission into the UC or CSU systems. The higher a student's index, however, the more likely he or she is to be accepted into the most competitive of the systems' universities, such as UC Berkeley and Cal Poly San Luis Obispo. Students can also improve their chances of admission by taking Advanced Placement (AP) courses, which count for more points in the eligibility index.

Industry expectations encourage school-to-career emphasis

The business community has added its own list of expectations to what high school students should know and be able to do. Concerns about the quickly changing nature of industry needs — and job applicants who lack even minimum basic skills — have led to a series of initiatives in California aimed at upgrading the work-readiness of high school graduates. In addition, efforts have been made at the national level to develop guidelines for both general and industry-specific workplace skill standards. (See the box on page 5.)

The push from business and some in the education community is to better coordinate and streamline vocational, academic, work-based learning, and youth services programs. High schools are being called upon to eliminate the dual-track curriculum for college and non-college bound students. The goal, instead, is to provide all students an opportunity to develop rigorous academic and employment-related competencies and to make learning such skills more relevant by tying them to work-based learning experiences. These school-to-career approaches are intended to better prepare students to choose among different career and higher education options.

Alignment of expectations remains an issue

The extent to which school-to-career has been adopted varies by school and school district. This in part reflects a larger tension regarding which expectations high schools ought to focus on. Some believe high schools' primary responsibility should be to provide all students with access to a college preparatory curriculum. Others believe a rigorous and relevant school-to-career curriculum that serves college-bound students and those who want to enter the work world right after graduation is preferable. One middle ground, already occurring, is to provide students with both options, either through school-within-school programs or magnet schools. (See the box on Partnership Academies on page 5.)

CALIFORNIA'S HIGH SCHOOL GRADUATION REQUIREMENTS COMPARED WITH OTHER STATES, AND UC/CSU ENTRANCE REQUIREMENTS

Subject	California State graduation requirements	1998 grad. requirements in US compared to California (In 5 states local school boards determine graduation requirements.)	UC/CSU a-f requirements (districts must receive certification that their courses meet university requirements)
Math	2 years	24 states require 2.5 years or more	3 years (algebra, geometry, & algebra 2 - or equivalent)
Science	2 years	16 states require 2.5 years or more 3 states require just 1 year	2 years (must be laboratory science)
English	3 years	40 states require 4 years	4 years
Social Studies (history, economics, etc.)	3 years	4 states require 3.5 years or more 17 states require 2.5 years or less	2 years (U.S. History or social science)
Arts/Foreign Language	1 year	24 states require some study of art or foreign language 3 states require completion of foreign language courses	2 years of Foreign Language 1 year visual/performing arts
Physical Ed.	2 years	Not Available	Not required

National Data: Council of Chief State School Officers, Policies and Practices Survey, 1998
CA Data: California Education Code & University of California

Edsource 6/99

TO LEARN MORE ABOUT STANDARDS

Resources on Skill and Academic Standards Projects

Many national and state organizations are developing standards-based programs integrating industry and academic skills. Below is a selected list of these organizations. For a comprehensive set of resources on standards, see the National Center for Research in Vocational Education's *Resource Guide to Educational Standards* (Sept. 1998) at

http://ncrve.berkeley.edu/MDS-1205
or call 800/762-4093.

National Skill Standards Board
1441 L Street, NW, Suite 9000
Washington, DC 20005-3512
202/254-8628
www.nssb.org
The National Skill Standards Board is developing a set of voluntary skill standards for different industry areas. Programs are underway to develop stronger linkages between industries and occupations, and academic and school-to-work efforts.

SCANS/2000 Center
Johns Hopkins University Institute for Policy Studies
Wyman Park Building, 5th Floor
3400 N. Charles Street
Baltimore, Maryland 21218
410/516-7174
www.scans.jhu.edu/
A national report done by the Secretary's Commission on Achieving Necessary Skills (SCANS) outlines employer expectations. The Center is working on several projects aimed at integrating SCANS into existing school-to-work, welfare-to-work and education reform efforts.

New Standards Project
National Center on Education and the Economy
P.O. Box 10391
Rochester, NY 14610
888/361-6233
www.ncee.org/OurProducts/perfStandards.html
The New Standards Project has developed performance standards based in part on the SCANS framework and comparable to work in other countries.

For information about California's academic standards
cde.ca.gov/board/board.html#standards
Downloadable as pdf files, or order from CDE Publications Division, 800/995-4099. (English/Language Arts and Math available now; Science, Social Science available soon.)

But to what extent can and will industry-based standards and career preparation goals be aligned with California's K-12 academic standards and evolving assessment system? And how will both be coordinated with university expectations? How much discretion will local school districts have in setting priorities based on community needs? And what level of local control over expectations is possible without undermining the statewide objective of high minimum expectations for student performance?

Student achievement and school accountability measures are changing

With the passage of two pieces of legislation in the spring of 1999, SB1X and SB2X, state leaders made it very clear what the stakes will be for school districts and high schools who do not pay attention to California's voluntary academic standards. The creation of a statewide high school exit exam tied to those standards could significantly raise the bar for students who expect to receive a high school diploma. And widely publicized rankings of school performance — with both interventions and rewards attached — is likely to place tremendous pressure on educators at both the school and district level.

PARTNERSHIP ACADEMIES EXPERIMENT WITH INTEGRATED ACADEMIC AND VOCATIONAL CURRICULUM

A growing number of California's high schools — more than 250 in total — are offering blended vocational and academic programs. Among the most notable of these efforts are California's Partnership Academies. Partnership Academies' technical education is purposefully broad, focusing on key industries as opposed to specific jobs. Industry areas include health, electronics, the media, agribusiness, building trades, natural resources, finance, and retail trade. Typically Academies run for three years for students, starting in the 10th grade, and are school-within-school programs, serving anywhere from 100 to 150 students. Business plays a key role providing oversight and guidance to programs, offering mentor support to students and providing work-based learning experiences during the summer and school year. In addition to some corporate support, about $14 million in state funds were allocated to support these programs in 1998-99.

Information about California's Partnership Academies is available from: California Partnership Academies, California Department of Education — Secondary Education Division, 721 Capitol Mall, 4th Floor, Sacramento, CA 95814. Phone (916) 657-3490. Or on-line at http://www.cde.ca.gov/partacad.

EdSource 6/99

All of this means high schools are facing dramatic new demands, when historically there were few penalties attached to student failure — for either students or schools.

Low-achieving students have faced few consequences

For students who did not see themselves going to a four-year college or university, the primary goal of high school attendance has been to receive a diploma. Research by Public Agenda and others shows that high school students often see few penalties for poor academic performance as long as they do enough to get by. Few employers request high school transcripts, and many parents ask little of their offspring in terms of grades.

California students also need not meet the UC/CSU eligibility requirements — or even perform particularly well in high school — in order to get more formal education should they want it. California's extensive and well-respected community college system gives students the opportunity to make up the deficits in their high school transcripts; earn specialized two-year degrees or vocational certificates; complete the first two years of their Bachelor's degree; or simply take classes they find interesting.

Even without a regular high school diploma, the door to further education is never shut. Local adult education programs provide high school dropouts over 18 with a chance to pass the national General Educational Development (GED) exam, an equivalent to a high school diploma. Students over 16 (or under 16 with parental permission) who choose not to finish high school can also earn their diploma by passing the California High School Proficiency Exam.

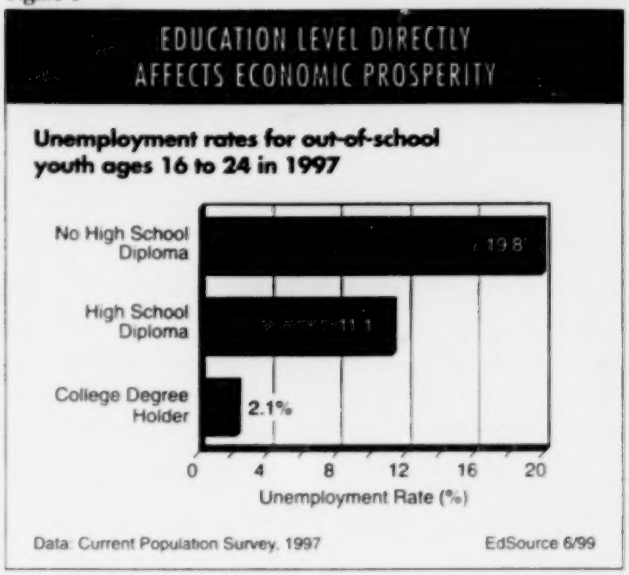
California is raising the bar on high school graduation

With the development of voluntary academic content standards, California's state leaders began increasing the expectations for what all students should know and be able to do. As adopted by the State Board, the standards lay the groundwork for requiring higher levels of performance from all students, particularly those who do not currently see themselves as college bound.

The new California High School Exit Examination (SB 2X, approved in March 1999) is intended to put serious and uniform expectations in place for all California high school students. With their diplomas dependent on passing this exam, students will hopefully be more motivated to do well in school. The first group of students to be fully affected by this new measure will be the high school class of 2004. Much work will need to be done in the intervening years to create the exam itself (see the box on page 7) and to prepare both students and schools for success on it.

Questions are already emerging about how the exit exam will operate, what level and type of content it will cover, and what impact it will have on school reform and overall student performance. One assumption is that this test will compel more uniformity in the basic knowledge and skills high schools aim to

Figure 4



teach. As some experts explain, one objective of the exit exam should be to ensure a consistent floor in the quality of curriculum offered while not limiting the learning or expectations for the highest-achieving students.

Many important issues will need to be addressed as the exam is developed and tested. Where exactly will the minimum performance level on the test be set? How will it compare with the proficiency tests districts now administer? What will be the response to the reality that the higher the "bar" is set, the more likely students are to fail? Practical questions include what will motivate students to stay in school once they have passed the exam, and what will happen to students who cannot pass.

Districts and individual high schools will also be implementing the exit exam within the context of their own existing programs, locally developed standards, and other reforms they have initiated. Among those reforms has been the development of alternative methods of assessing student achievement, such as portfolios and senior projects. These individualized assessments cannot reasonably be standardized, yet many believe they provide a more meaningful and accurate measure of what students know and are able to do.

School evaluation has depended on self-study process

Student performance — whether measured by a new exit exam or other methods — is just one ingredient in evaluating the overall quality of a high school. To provide a more comprehensive assessment, and identify specific areas for improvement, most high schools in California have for many years participated in a formal self-study process.

The Joint WASC Accreditation and CDE Program Quality Review (PQR) is the state's primary quality control mechanism for high schools. It is jointly overseen by the California Depart-

ment of Education (CDE) and the Western Association of Schools and Colleges (WASC). The PQR, which must be conducted every three years, is a condition for receipt of certain state and federal funds. Accreditation, which can be for up to six years, certifies to colleges, other schools, and the general public that a high school meets certain criteria and standards, and that it is achieving its own stated objectives. Consequently, schools often see this process as essential to their viability and pay particular attention to it.

In 1996, the Accreditation/PQR process underwent a dramatic transformation. Along with changing the name of the process from "Pursuing Excellence" to "Focus on Learning," WASC and the CDE turned the emphasis of accreditation away from teaching practices to stress student learning instead. This change mirrored the new state and national focus on student academic standards and performance as measures of school effectiveness.

At the heart of the new process is the responsibility of individual school communities to develop agreement around "Expected Schoolwide Learning Results," commonly abbreviated to ESLRs. These are statements of what all students should know, understand, and be able to do by the time they graduate.

As WASC Executive Director Don Haught describes it, schools began developing ESLRs that were more general and less measurable than officials had envisioned. In particular, schools were not integrating academic standards into their expectations. In response to this concern, WASC and the CDE have adapted the Focus on Learning process to provide a protocol for embedding locally adopted academic standards (at least as rigorous as state-adopted standards) into the ESLRs. This new accreditation process will be used by schools starting in the 1999-2000 school year.

New state accountability system will be in addition to self-study

Beginning in June 1999 the state will also start to use a different type of accountability system. This new accountability system, established by the approval of Senate Bill 1X, carries specific rewards for the schools identified as high achieving and interventions for those identified as under-performing. It will be developed in stages over the next three years (see the box on page 8).

While some of the specifics will change over time, the intent is that schools will be ranked based on an Academic Performance Index. This index, in turn, will rely heavily on students' performance on standardized tests, particularly the state's Standardized Testing and Reporting (STAR) system. Other measures, such as graduation rates and student and teacher attendance, can account for no more than 40% of the index. Further, schools will be judged on the progress made by the separate economically disadvantaged and ethnic subgroups at the school. The state will determine the rate of improvement expected of schools from year to year.

This accountability system represents a new strategy for California. Similar approaches have been attempted in other states with varying levels of success. In particular, questions arise about the effectiveness of intervention programs for low-performing schools and the extent to which financial rewards motivate educators. Overlying it all are fundamental questions about how much difference schools can make in the prospects for students who arrive at school with serious economic and other disadvantages.

TIMELINE FOR CALIFORNIA'S NEW HIGH SCHOOL EXIT EXAM

Prior to October 2000 — Based first on a review of existing high school subject matter examinations, the Superintendent of Public Instruction will develop and field test a high school exit examination in language arts and mathematics aligned with the state's academic content standards. An outside contractor will be hired to evaluate the examination and field testing. The evaluator will perform multi-year evaluations of the exam, the results, and its effects on student performance. State Board of Education approval is required.

Beginning of the 2000 school year — Parents must be notified about the date of the examination, the requirements for passing, and that passing the exam is a condition of high school graduation.

October 2000 — State Board of Education will adopt the High School Exit Examination. It will replace existing local proficiency standards which are typically set below a high school level and may not be consistent with state-adopted academic content standards.

By the end of 2000-01 school year — Students in grade 9 may *choose* to take the exit exam.

2001-02 school year — All students in grade 10 will be required to take the exit exam. They must continue to take the test until all sections are passed. School districts must provide supplemental instruction to students who do not demonstrate sufficient progress toward passing the exam.

February 2002 — The first annual report of a multi-year evaluation of the exit exam will be completed, with additional reports each even-numbered year thereafter.

Summary from SB 2X, passed in March 1999 EdSource 6/99

THE KEY ELEMENTS OF CALIFORNIA'S NEW SCHOOL ACCOUNTABILITY SYSTEM

The Academic Performance Index (API) — to be developed by the Superintendent of Public Instruction, with approval of the State Board of Education, by July 1, 1999. Standardized test results will constitute at least 60% of the API's value (a combination of the STAR test and, when available, both the high school exit exam and a planned standards-based matrix test). The remaining portion, up to 40%, will be made up of other components including but not limited to graduation rates and both student and teacher attendance rates. (An alternative system will be created for schools with fewer than 100 students and certain county and alternative schools.)

Ranking of schools — In June 2000, and every June thereafter, the Superintendent of Public Instruction, with the approval of the State Board of Education, will rank all public schools based on the API. Elementary, middle, and high schools will be ranked separately and placed into ten groups or deciles based on their performance. This will be publicly reported.

Targeted growth rates — The state will adopt annual percentage growth targets for schools based on their baseline API as determined in July 1999. When adopted, state performance standards shall be used to establish a statewide API performance target.

The intervention and reward programs — Funding is first provided for an Immediate Intervention/ Under-performing Schools Program. Initially, student performance on both the 1998 and 1999 STAR tests will be used to determine which schools are included in this program. Subsequently, schools that fail to meet their API growth targets may be identified for participation in the intervention program. Beginning in June 2000, a High Achieving/Improving Schools Program will be added. Schools that meet their API growth targets will qualify for nonmonetary and monetary rewards.

Summary of SB 1X, passed in March — EdSource 6/99

Coherence is crucial to schools' ability to succeed

How quickly and how effectively can today's high schools rise to the challenges presented by the new standards and accountability systems? The task may be nearly impossible without the alignment of other key aspects of the educational system, both at the state and local levels.

The state's work on standards and assessments, for example, is still incomplete. Curriculum frameworks, instructional materials adoption in K-8, and model curriculum guides for high school need to be aligned with the adopted state content standards. Beyond that, the state must insure that the tests it is using to determine student and school performance — the STAR test, a proposed matrix sampling test, and the new high school exit exam — align with the academic content standards. In addition, it must clearly define what constitutes acceptable student performance on those tests.

Whatever the state decides, it is reasonable to expect wide variability among districts in the emphasis they place on the standards and how they respond to the new state requirements. Local school districts will decide how and to what degree they will adapt their curricula to meet the state academic standards. They will also need to look at the skills and knowledge of their teaching staffs and align professional development activities accordingly.

Districts will also have to look beyond high school curricula to the preparation students receive in grades K-8 to make sure they are entering high school as well prepared as possible. Recent changes designed to improve students' preparation — including K-3 class size reduction and the elimination of "social promotion" in K-8 — are still in the early stages of implementation. It will be several years before their ultimate effect on high school achievement can be evaluated.

No matter how well aligned the system eventually becomes, its effectiveness rests on the quality of standards to which it is being calibrated. Has California done a good job with its academic content standards and will it do the same with its soon-to-be-completed standards for student performance? To the degree the standards fall short of what colleges or the workplace expect, so too may California students be seen as lacking.

Measuring student and school performance

How well are California's students and schools currently meeting the expectations outlined above? No complete answer to that question is available — in part because some things are difficult to measure and in part because some things simply have not been measured. This is particularly true if one attempts to summarize performance for the state as a whole — for all students or for all schools.

In looking at available performance measures, the results just begin to tell the story. Thus the following data are accompanied by explanations of their relevance, what they indicate, and in some cases the additional questions they provoke.

Little is known about student performance as a whole

Almost all of the student performance data currently available in California describes how well students are prepared for college.

CHANGING UNIVERSITY ADMISSIONS POLICIES MAY AFFECT STUDENT ELIGIBILITY

Some of the state university admissions requirements are in flux. In response to heightened concerns about maintaining racial diversity at UC campuses, the UC Board of Regents is in the process of reviewing changes to its policy that will give students three different paths to UC admissions, in all cases assuming they complete the required courses in high school. As of March 1999, the three avenues for gaining admission include:

1) Students must meet an eligibility index that combines their grade point average with their performance on the SAT I or ACT, and the SAT II subject matter exams. (Proposals are under consideration to change the weight given the various elements of the index.)

2) If they earn a high enough score on the exams, they can qualify regardless of high school grades.

3) By the end of 11th grade, students ranked in the top 4% of their class, with nothing below a C in the UC required courses taken to that point (at least 11 courses), will be identified as UC-eligible. By satisfactorily completing the remainder of the 15 required courses and taking the SAT, they will qualify for admission into the UC system as a whole. Test scores and work done in the senior year will be considered in admission decisions at individual UC campuses.

Supporters hope this newly approved third avenue for admission will provide disadvantaged students in urban and rural high schools with a greater opportunity — and, therefore, the incentive to excel academically — to gain admission to the prestigious UC system. Others contend that the policy may result in unintended consequences, such as the admission of less-qualified students and students requesting transfers to less competitive public high schools as a strategy to boost their class standing. The ultimate impact will not be known until after the policy takes effect in the year 2001.

Also under discussion is the validity and use of the SAT exam as a predictor of college success. At issue is the importance given to the SAT I as part of the college admission process. As a result, debate is on-going about a proposal to diminish or eliminate altogether the weight given to SATs in the "Eligibility Index" used for admission, particularly into the UC system. Currently students who have a 3.3 grade point average (GPA) in a-f courses are eligible for admission regardless of their performance on the SAT. Those with lower GPAs must meet cut-off scores on their verbal and math SAT I exams.

Under one new proposal, all students would have to meet a minimum cut-off score on the SAT I, but triple the weight would be given to the SAT II achievement tests. Some believe the latter are better predictors of success because they measure what students have actually learned in high school. Others propose dropping the SAT altogether in favor of the state's new high school exit exam.

EdSource 6/99

Little is known about students as a whole, or about the four out of ten who do not immediately continue their academic education after high school.

California went years without a statewide test

Due first to an attempt to improve the state testing system, and then a controversy over testing methods and results, California did not consistently administer a standardized statewide testing system from 1992-93 until 1996-97. As a result, it is impossible to use test results to measure if the skills of all high school students have improved or declined since 1992. The new California Standardized Testing and Reporting (STAR) system was first administered in 1998.

The 1998 STAR data in Figure 5 simply provides a snapshot — and a rather disheartening one. Experts, however, caution against drawing conclusions based on one year of results on this test. In addition, many feel that the value of the 1998 results were undermined because:

- the test was not aligned with the state's new academic standards;
- it required students with limited or no proficiency in English to take the test, and
- a mismatch existed between California's student demographics and the national sample to which they were compared.

Debate continues about some of these issues in year two. Hopes are that after the second year STAR results are made public in July 1999, Californians will have at least some information about whether or not overall student performance is improving. Certainly two years of data will be more meaningful, but researchers generally want to look at trends over many years, not just two or three.

PERFORMANCE OF HIGH SCHOOL STUDENTS — 1997-98 SCHOOL YEAR

Single year dropout rate — 3.3%
(the total number of dropouts in all grades 9-12, divided by the October enrollment figure)

High school graduates completing courses required for UC/CSU admission — 36.6%

Graduates who took the SAT — 47%, with scores comparable to the US average

Students participating in Advanced Placement Exams — 13.2% (in 1996)

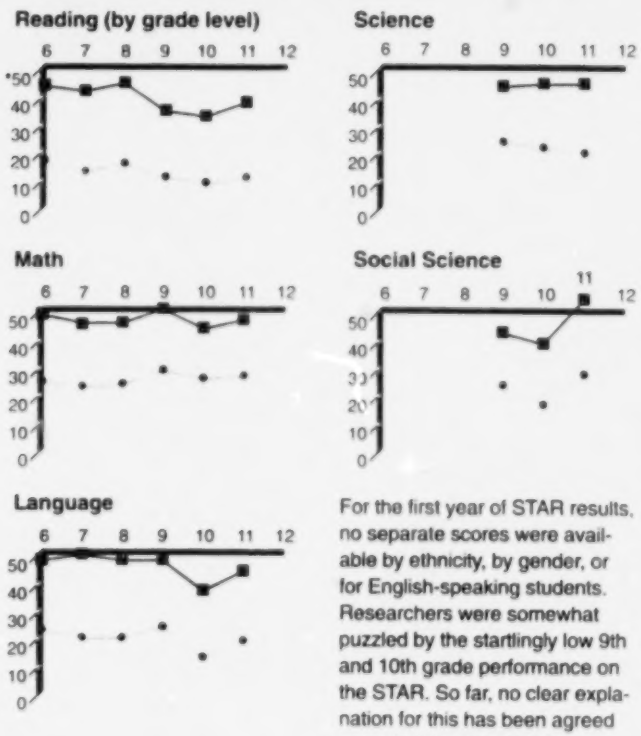
Graduates attending college (either 4-year or community college) the following September — 59.6%

EdSource 6/99

Figure 5

1998 STAR SCORES GAVE A SNAPSHOT OF HIGH SCHOOL PERFORMANCE

Statewide averages for ■ all students and for ● LEP students.



For the first year of STAR results, no separate scores were available by ethnicity, by gender, or for English-speaking students. Researchers were somewhat puzzled by the startlingly low 9th and 10th grade performance on the STAR. So far, no clear explanation for this has been agreed upon, but it raises questions about the test as well as students' abilities and motivation.

* National Percentile Ranking
Data: California Department of Education

EdSource 6/99

Even with data collected over time, a range of issues still exists regarding the test's validity, particularly at the high school level. A lack of student motivation to perform well is one concern. Most recently, in the spring of 1999, some high school students protested and refused to take the test. Such events could certainly erode confidence in the results for some schools in grades 9 to 11. Another issue is whether the test items fully correspond to the curriculum sequence taught by high schools at different grade levels.

Other voluntary exams do not provide statewide information

For many years, some California high school students have also participated in the Golden State Exams (GSE). These state-sponsored exams test students' knowledge and ability in specific subjects, and with a few exceptions are offered to students completing the appropriate classes such as algebra and chemistry. Three of the exams — high school mathematics, written composition, and reading/literature — test general subject knowledge and abilities. Any high school student can take these exams.

In recent years, the state has used the GSE to acknowledge student academic success. But while all districts must offer the tests, student participation is voluntary. Thus the results do not reflect all students in California, nor allow for comparability among schools.

Students who participate in vocational education programs have a similar opportunity to take the Assessments of Career Education or ACE exams. Begun in 1997, the ACE program offers voluntary exams in career-technical areas (e.g. Agricultural Core and Health Care) to those students who have taken the corresponding course-work. In 1999, exams are being given in five areas.

In 1998, 820,000 Golden State Exam (GSE) tests were taken in 11 different subject areas.

Dropout rates raise questions

The single-year dropout rate reported by California school districts has shown a steady decline in the last decade. This mirrors a national trend. Significantly, the most dramatic improvements in California have been in the rates for black and Latino students, who have traditionally had the highest dropout rates (see Figure 6).

For the purposes of this reporting, a dropout is defined as a 9th to 12th grade student who neither attends school nor requests a transfer to another school for 45 days. Schools do not confirm that a transferring student actually enrolls at or attends a new school. To arrive at its annual, single-year dropout rate a school district simply divides its total fall enrollment in 9th to 12th grade into the number of dropouts in those same grades. The result is expressed as a percentage.

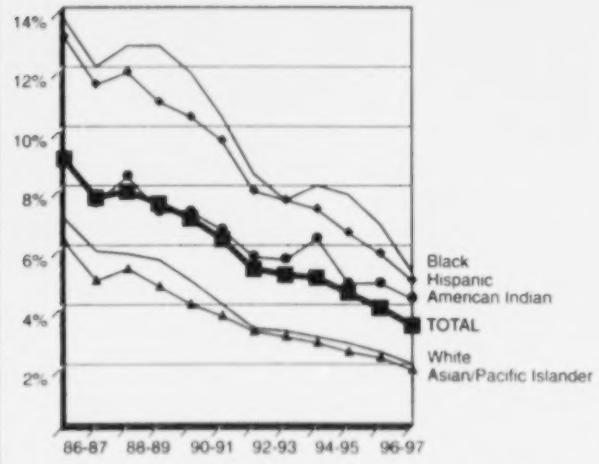
In the spring of 1999 the State Board of Education ruled that, beginning with the 1998-99 school year, the state must also estimate how many students might drop out during a four-year period. This hypothetical percentage will be calculated by combining the current dropout rates for the four grades, 9-12.

The low dropout rates are controversial because they appear to contradict the graduation rate, reported as only 67.2% for 1997-98. However, some statisticians say the method used to calculate the graduation rate may underestimate the number, in part because it does not account for students who transfer to other schools, finish in alternative programs, or test out of high school.

Figure 6

ALL ETHNIC GROUPS ARE SEEING LOWER DROPOUT RATES

Based on district-reported data and the state's calculations, California's one-year dropout rate was cut in half over a ten-year period.



Data: California Department of Education EdSource 6/99

College preparation data reveals positive trends

In its 1996 Eligibility Study, the California Postsecondary Education Commission (CPEC) reports many positive trends regarding California's high school graduates. In comparing the class of 1996 with its predecessor in 1990, the CPEC said "a larger proportion of public high school graduates enrolled in the...curriculum required for university admission...while the proportion of graduates whose academic experiences during high school were essentially unrelated to college preparation diminished."

More students are aiming for college

CPEC uses several measures to conclude that the percentage of students aiming for college has increased. Perhaps most telling is that the proportion of students statewide completing the a-f course requirements in high school increased from 32.6% in 1990 to 37.9% in 1996. CPEC reports, however, that more stringent admission requirements at California's public universities actually resulted in a smaller proportion of students being eligible for admission. (See the box on page 9 for a fuller explanation of admission requirements.)

The CPEC data also reveal some important differences in performance based on students' ethnicity and gender (see Figure 7). While an unusually high proportion of Asian students succeed in completing the course requirements, the reverse is true for both Latino and black students. Among students as a whole, girls are more successful than boys, and the difference became more dramatic from 1990 to 1996.

Master plan dictates much regarding attendance rates at CSU/UC

In 1960, California's Master Plan for Higher Education established student eligibility criteria for the three segments of the state's higher education system, the community colleges, the California State University (CSU), and the University of California (UC). They are as follows:

- The state's 106 community colleges are to accept all applicants 18 years and older who can benefit from attending.
- CSU is to draw from the top one-third of high school graduates and all qualified community college transfers.
- UC is to draw from the top 12.5% of high school graduates and accept all community college transfers.

In 1996, both CSU and UC raised their admission requirements in order to keep their respective eligibility pools within the Master Plan criteria.

SAT scores are comparable to the national average

High school students take two different types of SAT exams. These include the SAT I, the test of verbal and math skills with which most people are familiar; and the SAT II, achievement exams in a variety of subject areas. For UC admission, students must take three SAT II exams.

When it comes to the SAT, the performance of California's students stands up well against national comparisons across a variety of indicators. One important measure is the number of

Figure 7

COLLEGE ELIGIBILITY RATES REVEAL GAPS BASED ON GENDER AND ETHNICITY

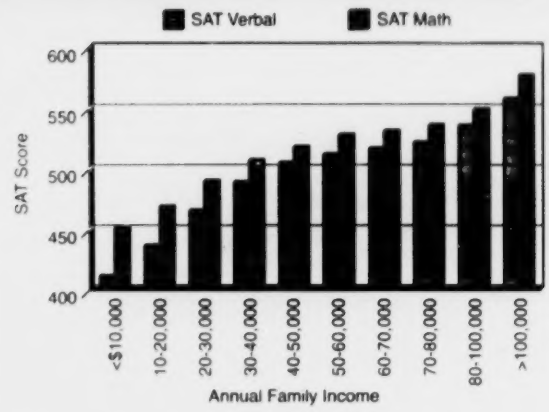
Percent of California high school graduates completing the a-f requirements in 1996.

All	36.0%
Males	32.7%
Females	37.9%
Asians/Pacific Islanders/Filipinos	53.6%
Blacks	27.9%
Latinos	22.3%
Native Americans	24.0%
Whites	39.7%

Data: California Department of Education EdSource 6/99

Figure 8

SAT SCORES CORRELATE CLOSELY WITH STUDENT ECONOMIC STATUS



High SAT scores are strongly correlated with higher family incomes. Although 31% of the California test takers had family incomes of less than $30,000, six percentage points more than the national average, the state's students performed as well as their counterparts throughout the US.

Data: The College Board EdSource 6/99

students who take the test. Because it is voluntary, test taking indicates that a student sees himself or herself as college bound. In 1997-98, 47% of the state's high school graduates took the SAT I, four percentage points more than the national average. Reflecting the California student population, test takers were also more ethnically diverse than in the US as a whole. About 19% of them were not native English speakers, compared to 8% nationally. As a whole, California students who elect to take the test generally perform near the national average on both the verbal and math portions of the SAT I. Scores have climbed in recent years.

Performance on AP exams outpaces other states

Increased participation in Advanced Placement (AP) classes also indicates a greater school and student emphasis on college preparation. High schools purchase the curriculum and teacher training for AP classes from the College Board. Once they complete the course, students take a test to attempt to earn college credits in high school.

Students who take AP courses have an advantage on college admissions because an "A" in an AP course counts as five points instead of four on a student's grade point average. In addition, those who pass an AP test receive college credits, saving them time and expense in college. According to the College Board, the percentage of California high schools offering AP classes increased from 55% in 1988 to 70% a decade later. California ranks ninth among the states in this measure. This does not account for the fact that some schools offer a full complement of the courses while others offer only one or two.

Some research is emerging that raises questions regarding the extent to which all students have comparable access to these courses. Many believe the findings are sufficient to warrant further exploration into the whole subject of AP courses, where they are offered, and what advantages they provide.

Skill and knowledge of half of CSU entrants do not meet college-level expectations

According to the eligibility criteria set by the CSU system, about three out of ten California high school graduates are fully eligible for admission. However, it appears that even though these students have passed college-prep courses and tested well enough on the SAT to be admitted, half of them are not necessarily ready for college-level work. Based on CSU placement tests given to entering freshmen in the fall of 1998, officials reported that 54% needed remedial mathematics and 47% needed remedial English.

Reputedly, these figures were actually a relief to CSU officials because they signaled a leveling off of a remediation problem that had previously been escalating. In fact, officials had expected the rates to increase this year because, for the first time, nearly all CSU freshmen took the placement tests.

Some question how well these tests and California's high school curriculum are aligned. Another concern is that high school teachers and students are not aware of their content.

Both educators and policy makers have been looking at these issues. A new university strategy includes better publicizing of CSU entrance standards, helping high school students prepare, and offering the tests to students earlier. Many K-12 districts are working closely with their local CSU campuses on this effort. In addition, state lawmakers in May 1999 were considering legislation that would require CSU to make the tests available to high school juniors and seniors.

AP TEST TAKING IN CALIFORNIA EXCEEDS US RATE

Of all the high school students in the United States taking AP tests, 17% were in California, and they took 18% of all the tests. By contrast, about 12% of public school students are in this state.

Not only were more California high schoolers taking AP exams, more were passing them. In 1998, 13.4% of all juniors and seniors passed the exams, compared with the national average of 9.1%.

Data: The College Board EdSource 6/99

More and better data is needed to accurately assess high school performance

Beginning in 1999-2000, high schools in California are going to be held accountable for the progress their students make. Unfortunately, the state has limited data available to describe their starting point. Beyond the goal of having more students meet college eligibility requirements, the targets for performance also remain unclear.

State policy makers and researchers recognize some of these limitations, and work is proceeding to address them. One critical piece is the California School Information Services (CSIS) program. This is expected to include a statewide, computerized system for tracking individual students. This system, currently under development, would permit the state to:

- report more accurately how many high school students graduate and how many drop out;
- look at the progress of individual students or groups of students over time; and
- evaluate more effectively what happens to students who move from school to school.

The high cost of the system and the need to protect student privacy remain serious challenges the state must meet if it is to be implemented.

Schools must plan for the coming school year knowing that it will still be many months before state officials provide a clearer view of precisely how school and student performance will be measured. And they can only hope the public understands that it will be many years before their progress can be accurately and fairly determined.

Some student characteristics challenge schools' ability to improve performance

Student test scores, which so often stratify along socio-economic and ethnic lines, illuminate some of the challenges public schools face. Different students come to school with different abilities, backgrounds, and attitudes. Those factors affect student achievement in both obvious and subtle ways, and schools vary in their strategies for addressing them, with varied success as well.

A full exploration of these important issues is outside the scope of this overview on California high schools. EdSource suggests the resources noted in the box on page 14 as a starting point for those wanting to explore them in greater depth.

COMPARISONS OF CALIFORNIA'S HIGH SCHOOLS REVEAL COMPLEXITIES

California's high schools differ greatly from one another. They serve different populations and communities. And they vary dramatically in size. That makes the evaluation of their performance more complex than simply looking at how well students do on a standardized test. In fact, popular wisdom and significant data indicate that test scores are most easily predicted by looking at student demographics. The critical question is what difference the school is making in its students' performance – the value added.

In an attempt to explore school performance, and the underlying complexities, EdSource looked deeply at a small number of high schools. These schools were chosen to reflect the range of difference among California high schools in terms of socio-economics and the number of Limited English Proficient (LEP) students they serve. The data available about each school included information about students, staff, and school services.

Our sample shows the tremendous diversity among schools in California and the great variability in school performance. It also illustrates that one can get a rich and meaningful perspective on a school by looking at these multiple items of data. And sometimes the results are intriguing.

One suburban central California high school, for example, serves over 3,700 students, with higher than average proportions of LEP students (24.8%) and students who qualify for free or reduced-price meals (57.5%). The dropout rate at this school (1.9%) was lower than the state average but average class sizes (31) were larger. Students' performance on the STAR test was well below the state average in every subject area, with the high proportion of LEP students also trailing their counterparts statewide. Conversely, the number who completed the UC/CSU course requirements was at the state average (38%) but the number of students who actually attended those institutions was only 18%. Over 45% of students went on to community college.

The dynamics are somewhat different at a rural Southern California high school with nearly 1,900 students. This overwhelmingly white school (87%) has almost no LEP students and just 13% eligible for free or reduced-price meals. The school has about the same class size and dropout rate as its suburban counterpart described above. Students scored at or near the 50th percentile on the STAR test, generally higher than state averages. Four out of ten graduates completed the UC/CSU course requirements, but only 15% reportedly went on to a public four-year university. Community college attendance was also quite low.

These profiles raise interesting questions. Are the students completing college preparatory classes getting the same quality of education in both schools? How much of the gap in STAR scores is explained by the difference in LEP populations? Are large numbers going to private colleges (for which only limited data is available) and if not, what keeps so many students from pursuing the college education they have prepared for? What do they do instead? It is through questions such as these, and in-depth analysis, that data turn into meaningful information about school performance.

EdSource 6/99

TO LEARN MORE ABOUT STUDENTS

Peer culture, disengagement, and motivation

Lawrence Steinberg's, *Beyond the Classroom: Why School Reform has Failed and What Parents Need to Do* (1997), describes his research into the influence of parents, peers, and teenagers' after-school activities on their motivation and academic success. To order a copy of the book, contact Simon & Shuster, New York City or their web site at www.SimonSays.com

For a first-hand perspective on what adolescents really think about their education and future, see Public Agenda's report, *Getting By: What American Teenagers Really Think About Their Schools* (1997). Adolescents' opinions on a wide range of subjects are reviewed based on poll and focus group results. For more information, contact Public Agenda at 212/686-6610 or www.publicagenda.org

The effects of student poverty and mobility

Russell W. Rumberger, et.al., examines the impact and causes of mobility among high school students in their study, *The Educational Consequences of Mobility for California Students and Schools* (1999). To obtain a copy of the report, call Policy Analysis for California Education at 510/642-7223 or http://pace.berkeley.edu

Strategies for working with immigrant youth

Educators interested in strategies and models for improving the learning opportunities and achievement of immigrant youth should turn to California Tomorrow's *Igniting Change for Immigrant Students: Portraits of Three High Schools* (1999). For a copy of the report, call 510/496-0220 or www.californiatomorrow.org

See these related EdSource EdFacts:

- *Peers, Parents, and Schools: Two Views on How They Affect Student Achievment* presents the perspectives of two scholars on the cultural, familial, and institutional factors that most impact student learning and academic performance.
- *Resource Guide: Keeping Schools and Students Safe*, a list of resources available to help educators, parents, and community leaders address school safety issues.

Students who are unmotivated and disengaged

More so than at any other grade level, students in high schools enter with pre-existing attitudes about school and their place in it. Many factors outside the high school's direct control — including societal influences, home situations, peer groups, individual hopes for the future, and past school success or failure — help create those attitudes. But schools can make a difference. The strategies they use to engage and motivate students can be fundamental to improving student performance.

New research and new educational practices are addressing this relationship between school programs and student motivation. The results so far are rich in information and often controversial.

Students at risk – poverty and mobility deter achievement

The relationship between student poverty and lower student achievement has been well documented. A 1999 UC Santa Barbara study by Russell W. Rumberger adds to the picture by showing that students from poor families — particularly those with single parents and other "non-traditional" configurations — tend to move more often. Further, that mobility has consequences for both students and schools.

Based on both data and interviews, the study found that students suffer a variety of negative psychological, social, and academic consequences from changing schools. Interestingly, these students' schools and classmates appear to be affected as well because of the "chaos factor" caused by frequent coming and going of students. Test scores, for example, were lower in classrooms with high mobility rates, even among non-mobile students.

Immigrant youth face extra hurdles

High schools face double the challenges when educating students newly-arrived from other countries. These students are at greater risk of dropping out both because they lack English skills and because they must master new content quickly. Those with formal schooling in another country may find, for example, the curriculum sequence different here. Others enter missing basic academic skills because their schooling was interrupted in war-ravaged or economically depressed countries. While most can pick up informal conversational skills in a couple of years, acquiring the more advanced English literacy skills needed to read history texts, write capably, or solve complex math problems is likely to take substantially longer. On top of all that, immigrant youth must also learn to understand and adapt to a new culture and social norms.

In 1997-98, nearly 240,000 Limited English Proficient 9th-12th graders were enrolled in California high schools, about 15% of all high school students. Many educators believe that more intensive remedial support is essential if these students are to acquire the language and academic skills they need to meet new state standards. This concern takes on greater importance in light of the state's new exit exam requirement. Beginning in 2004, all students, regardless of their English proficiency, will be required to pass the exit exam — in English — in order to receive a high school diploma.

TO LEARN MORE ABOUT HIGH SCHOOL REFORM

Many reform strategies and alternative approaches to organizing high school are attempting to address these underlying, student-centered issues. Throughout California are numerous examples of reform efforts and special programs that provide alternatives to the traditional comprehensive high school. Many focus on more clearly defining their expectations and narrowing the type of students they serve. Following is a partial description of the scope of these efforts, with contact information as appropriate and available.

STATE-SPONSORED SCHOOLS/PROGRAMS

Alternative education programs, authorized by state law but established and maintained by local governing boards and county offices, include a wide variety of programs such as continuation schools and the independent study strategy. Other settings provide educational services to students with discipline problems or criminal records. For information contact the Educational Options Office of the California Department of Education (CDE) at 916/322-5012.

Regional Occupational Centers & Programs (ROC/ROP), often involving joint powers agreements among multiple school districts, provide vocational training to students enrolled in local high schools. For information contact the ROC/P Unit of the CDE at 916/322-5050.

HIGH SCHOOL REFORM PROGRAMS

To a great extent they focus on how time is used and how students are grouped together for instruction. Reducing the size and impersonality of the typical "comprehensive" high school is often a major goal of these efforts. Charter schools, magnet programs, and new programs like middle college are all locally established. National networks provide models for these and other reform efforts.

An Educator's Guide to Schoolwide Reform. Sponsored by several national organizations, this comprehensive guide rates the effectiveness of 24 major schoolwide reform approaches, including several geared to secondary schools specifically. Copies can be ordered and are available on-line through the sponsoring organizations: the American Association of School Administrators (AASA), the American Federation of Teachers (AFT), the National Association of Elementary School Principals (NAESP), the National Association of Secondary School Principals (NASSP), and the National Education Association (NEA). Or contact the publisher: Educational Research Service, ERS Member Services Information Center, 2000 Clarendon Boulevard, Arlington, VA 22201. Phone: 800/791-9308, fax: 800/791-9309, website: www.ers.org.

The New American High Schools Initiative. Twenty California high schools received grants and are participating in this program sponsored by the U.S. Department of Education, Office of Vocational and Adult Education. Information is available at www.sonoma.edu/cihs/nahs or from the California Institute for Human Services, Sonoma State University, at 707/664-2243.

Capacity and resources

From the few indicators available, high school performance in California today appears to be on a slight, generally upward trend since 1990. But while most observers see some progress, they also recognize that it will take more to meet new and higher standards.

In pushing schools toward this goal, however, policy makers and the public face a critical question. Do California's high schools have the resources — both human and financial — to accelerate student improvements and meet these higher expectations? While the answer to that question varies by school and district, statewide information points to deficits that almost all high schools in California confront.

High schools do not have the qualified staff they need

Schools are as strong or weak as the teachers, counselors, and administrators who run them. Given the fact that between 80% and 85% of school district expenditures go to pay staff salaries and benefits, staffing is arguably the most significant resource issue schools confront.

Most California high schools face at least some difficulty making sure enough qualified professionals are on staff. In some places this has reached crisis proportions. Problems of supply, distribution, and funding all contribute to this situation. But while the state has put some focus on addressing the teacher part of the equation, the lack of counselors and administrators has received less attention.

Teacher shortage and distribution problems

California's chronic shortage of qualified teachers is well documented. At the high school level, continued growth in student enrollment and proposed reductions in high school class size could make a bad situation worse. The shortage, however, does not affect all schools equally. Rather, the shortage exacerbates two other problems: the assignment of teachers to subject matter areas in which they have little expertise and the reality that not enough qualified educators are willing or available to work in the most difficult settings.

At the high school level in particular, a teacher's in-depth knowledge of subject matter is critical to how well students master the subject. With that in mind, ideally high schools would plan which courses they should offer each year and then find the appropriately credentialed teachers.

The reality, however, is often quite different. The location of a high school and a district's ability to offer a competitive salary can determine how easily it attracts new teachers. In addition, the assignment of existing staff can be limited by the decisions of school administrators and by union contract provisions. All of these factors may influence the degree to which teacher assignments match the expertise a high school needs.

BEST COPY AVAILABLE

STAFFING IN K-12 SCHOOLS TRAILS OTHER STATES

California teachers, school principals, and counselors served a much higher ratio of students than their counterparts elsewhere in the U.S. in 1996-97. While ratios in high schools specifically would vary somewhat, it is reasonable to expect differences would be comparable.

	California	Texas	New York	U.S. Avg
Students per teacher	22.9	15.5	15.4	17.1
Students per principal & asst. principal	537.2	330.3	415.0	370.2
Students per counselor	1092.1	458.1	520.1	512.6
Students per total staff	12.1	8.0	7.8	8.9

Data: National Center for Education Statistics, "Digest of Education Statistics" 1998

EdSource 6/99

TO LEARN MORE ABOUT STAFFING AND FINANCE

For more information on school staffing and school finance issues, see the following EdSource publications:

Strengthening Teacher Quality in California: Defining Consequences, Building Capacity, 4/99

Recruiting, Preparing, and Credentialing California's Teachers, 4/97

How California Compares, 11/98

California's School Principals: At the Center of School Improvement Efforts, 3/98

School Finance 1998-99, 10/98

Understanding School Budgets - As Simple as 1,2,3, 9/96

Richard Ingersoll, from the University of Georgia, has documented the pervasiveness of this problem, which he calls out-of-field teaching. Compared to most other states in 1993-94, a higher percentage of California teachers had less than a minor in the subject matter to which they were assigned.

More recently, Mark Fetler, of the California Department of Education, looked at the effects of out-of-field teaching. His study was based on 1998 data for teachers assigned to teach mathematics in the state's comprehensive high schools. He found that the schools whose students performed lower in mathematics also had a higher percentage of emergency-credentialed or less well-prepared teachers. (See the box on page 17.)

In response to teacher recruitment needs, lawmakers, universities, and educational leaders have ushered in several new programs aimed at attracting, preparing, and training teachers. Some of these are specifically aimed at the secondary school level. Whether new and existing programs are enough to solve the shortage problem or provide teachers with appropriate and sufficient training remains to be seen.

Increasingly, the issue of low teacher wages is also being raised in this discussion. The problem is particularly perplexing in the areas of math and science, where the private sector offers opportunities that are so much more lucrative.

Guidance and support services in short supply

While teacher quality issues currently occupy the spotlight in California, those familiar with the state's high schools have long identified another staffing crisis — school counselors. The concern is a lack of guidance and support staff brought on at least in part by funding shortfalls in the early 1990s. According to the most recent national data collected by the U.S. Department of Education, California ranked last among states in its average student-to-counselor ratio (see the box on this page).

During the 1996-97 school year, the California Association for Counseling and Development (CACD) surveyed the state's guidance counselors. Respondents reported inadequate time to handle increased caseloads and increasing number of students with social, emotional, and economic-related academic problems. As one counselor put it there are "too many of them, too few of us."

Filling the counselor gap: private investment and public programs

At the same time counseling services have been cut, the college admissions process has become more competitive and more complex. In response, a small but reportedly growing number of parents are resorting to hiring private advisors to help their children with course selection, test preparation, and the college application process. Those within the counseling profession have questioned the quality — the level of training and credentials — of such independent advisors. Others report that some

TEACHERS WITH LESS THAN FULL QUALIFICATIONS ARE NOT UNCOMMON IN CALIFORNIA HIGH SCHOOLS

Out-of-field teaching rates in California were among the highest in the U.S. in 1993-94.

Mathematics	46.4%
Science	22.6%
English	24.8%

Data: National Commission on Teaching and America's Future

Use of emergency credentials rose in California secondary schools in 1996-97. Out of more than 50,000 secondary school teachers, the number serving on an emergency permit basis or without having fully completed a specialized subject matter credential included:

Mathematics	1,381
Science	1,716
English	1,249

Data: California Commission on Teacher Credentialing EdSource 6/99

A SHORTAGE OF COUNSELORS AT ALL GRADE LEVELS

California had 1,092 students (K-12) per counselor compared to the national average of 513 to one in 1996-97. This ratio varies by grade level.* A 1996-97 survey** of California guidance counselors in 142 school districts put the average ratio of students to counselors at:

530:1 at the high school level,

625:1 at the middle school level, and

2,381:1 at the elementary school level.

California high school counselors report spending most of their time in three areas:

50% on academic counseling,

20% on career and vocational counseling,

25% on personal and social counseling, and

5% other.

*National data: National Center for Education Statistics
**Survey results: Wilson, Milton, CACD Survey of Counseling Programs and Services. December 1996.
Results reported at CACD conference, 1997. Edsource 6/99

colleges and universities recommend against using them, contending they do more harm than good. Another concern is that this trend exacerbates the achievement gap and inequity in access to higher education based upon economic privilege.

Public and private agencies, as well as some colleges and universities, have meanwhile increased their support for early intervention and academic outreach programs. These efforts are designed to improve access to higher education for traditionally underrepresented minorities and women. In recent years, growth in these programs has been largely in response to the abolition of affirmative action in college admissions in California. For 1998-99, the state budget contained nearly $50 million earmarked for programs to help low-income students qualify for college admission. Other legislation called for more academic counselors at the lower grades. This was in response to data showing that almost no academic counseling takes place before high school.

The overarching question is what level of academic, career, and social counseling services should be available to all students at all grade levels. As part of addressing that question, California might begin by looking at what works in other states.

Principals have new roles, greater responsibility

High school principals face increasing challenges and perhaps a paradox. While their traditional role as an administrator remains important, they are also expected to play a more active role as instructional leaders. With the advent of the school restructuring movement, this has meant supporting and often facilitating shared decision making that gives all the members of the school community — including students, parents, and teachers — a say in the direction of reforms. As a result, the role of the high school principal has shifted from that of an authoritarian to that of a facilitator and change advocate.

California's 1999 accountability laws added a new dynamic to this changing role. At the very same time high school principals are expected to promote reforms such as shared decision making, they are also first in line to answer for results should school and student performance fall short of new expectations. A provision of SB 1X (see box on page 8) says that if a school fails to meet its performance goals, the principal can be held primarily responsible and be reassigned. Principals will also undoubtedly act as the primary sounding board for parent and student concerns about the state's new high school exit exam.

Qualified applicants for the principalship are few and far between

This increasing pressure — combined with a salary schedule many believe is generally too low — has left school districts scrambling to find qualified applicants, or any applicants, willing to fill the shoes of a high school principal. This shortage is occurring nationwide. Last year, about half the districts surveyed in a national study of 400 districts conducted by the National Association of Secondary School Principals and

National Association of Elementary School Principals reported difficulty in trying to fill vacant positions.

In California the challenge of finding school leaders may be greater than in other states. According to the National Center for Education Statistics (NCES), in 1995-96 California's principals were responsible for more students on average than principals in almost every other state. Their pay, meanwhile, was just slightly above the national average in a state which has a relatively high cost of living. As is true with teachers, the most difficult school settings — in urban and rural areas — reportedly often lose their best site administrators and candidates to suburban districts where the job is somewhat easier.

School culture and climate

Particularly at the high school level, a school's effectiveness at helping students learn goes deeper than the quality of teaching it provides. High schools must succeed at creating a safe, supportive climate that helps students stay engaged in school and plan for productive lives after graduation. After the fatal incident at Columbine High School in Littleton, Colorado, in April 1999, these issues are gaining even more attention and importance.

Where are California schools in meeting this objective? And what resources do they need to do so?

Safety in California schools is improving, but concerns remain

Maintaining a safe, orderly school environment is an important prerequisite for effective teaching and learning. California began a new system for collecting and publishing statistics on school safety in the 1995-96 school year. School districts report and the CDE validates statistics on four major categories of crimes at school sites — property crimes, crimes against persons, drug and alcohol offenses, and other offenses (including possession of weapons and bomb threats).

"The number of guns confiscated on school campuses went down 11% from 1995-96 to 1997-98 — from 724 to 647."

California Safe Schools Assessment, 1997-98 Results

Three years of data from the California Safe Schools Assessment indicate a small but consistent decline in offenses statewide. This is particularly true with the most serious offenses, crimes against persons and gun possession. The former includes battery, assault with a deadly weapon, robbery/extortion, sex offenses, and homicides. The rate of these offenses at high schools has declined from 6.4 to 4.8 per 1,000 students, a 25% reduction.

The most common offenses reported on high school campuses are for drug and alcohol, which have occurred at a rate of between 10 and 11 per 1,000 students the last three years. The rate of these crimes has changed very little statewide, but may have improved in some communities due to new and more effective prevention and intervention programs.

What resources do schools need to maintain order?

Keeping order on high school campuses requires that school officials look at two very different problems — school violence and substance abuse. In both cases, schools are only a part of the solution, making it important to develop strong partnerships with parents, local law enforcement, the juvenile justice system, and community-based service organizations.

Experts recommend that a first step in addressing a school violence problem is a systematic assessment of programs, policies, and processes at the classroom, school, and district level. Studies show that schools with low levels of violent behavior are distinguished by: a positive school climate; a consistent and fair discipline policy; highly visible reinforcement of pro-social behaviors; and an appealing, non-institutional atmosphere in the school building.

Substance abuse problems, on the other hand, call for a long-term prevention strategy that touches all students, begins at the elementary level, and involves a comprehensive, well-designed curriculum. California schools have some state and federal funding available for such programs.

Many actions to address school safety have already been taken in California. In a publication entitled *Getting Results*, the CDE chronicles school and school district efforts that have been effective or show promise in creating safer school environments. In 1998, the California Legislature also began requiring schools to develop a comprehensive school safety plan. These documents represent a monumental effort on the part of schools to address the "what ifs" should a safety crisis of some type befall a school.

In the aftermath of the Columbine High School tragedy, state lawmakers and local school officials joined other Californians in asking if more can and should be done. One result was a set of proposals related to school safety in Governor Gray Davis' May budget revise. He recommended the state earmark $100 million of school allocations for expenditures such as additional high school counselors and school safety equipment, including metal detectors.

After-school programs reduce problem behaviors

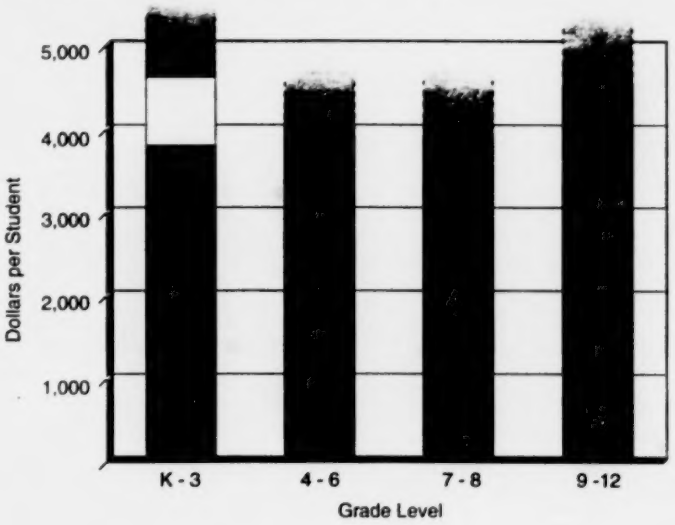
Substantial research indicates that students' lack of school success is closely connected with their participation in risky behaviors such as truancy, smoking, high-risk sexual activity, criminal activities, illicit drug use, and alcohol consumption. Further, high school students who are unsupervised after school are far more likely to engage in these behaviors. Conversely, students who participate in quality after-school programs tend to improve their school performance, avoid these risky behaviors, and stay in school.

Figure 9

AN ESTIMATE OF SCHOOL FUNDING BY GRADE LEVEL

The school finance system in California was based on the assumption that high school programs — which offer a much wider curriculum and more extra-curricular activities — cost more to operate. As a result, high school districts receive more general-purpose (revenue limit) money per student than elementary districts. Unified districts receive an amount in between. Since high schools exist in both unified and high school districts, it is difficult to determine a statewide level of general purpose funding. In high school districts, however, the average revenue limit in 1997-98 was about $4,500, compared to $3,800 for elementary districts.

In addition, districts receive differing amounts of money for categorical programs. These are allocatad according to the specified purpose of the program — the grade levels it is intended to serve for example — and the characteristics of the district or its students. The best available comparison of funding between high schools and the other school levels in California was created by the California Department of Education for use as a funding model for charter schools. It is based on both general and special purpose funding currently available to public schools.



- **Revenue Limit** — general purpose money that comes from state funds and local property taxes.
- **Some State Categoricals** — these are the programs for which all schools could generally qualify. Some of the high school categorical programs included here are remedial summer school program, 9th grade class size reduction, certain staff development programs, 10th grade counseling, apprentice programs, specialized secondary schools, agricultural vocational education, and partnership academies.
- **K-3 Class Size Reduction** — the $847 per pupil for this program is available only for K-3 classrooms through a grant program for which primary schools must qualify.
- **All Other Categoricals** — these programs are not accounted for by grade level. They include state and federal funding based on schools' student populations, such as economic impact aid and special education, some grant-based programs, and lottery revenues.

Data: California Department of Education; EdSource

EdSource 6/99

Some after-school extra-curricular programs are institutionalized on high school campuses. The most notable and the one in which the largest portion of students participate is competitive sports. Other activities, such as performing arts programs, are also available, although somewhat less widely. Much less common are academically oriented activities, such as homework and tutorial centers, and the job training, enrichment classes, and teen support services many experts recommend.

The U.S. Department of Education reports a "chronic shortage" of after-school programs nationally. In California, the recent focus of additional funding for these programs has been on younger children.

In California, funding adequacy is a key issue

In California, the examination of schools' capacity for improvement inevitably turns to a discussion about money. The state ranked 41st in per-pupil expenditures in 1996-97, with a K-12 spending level of $5,327 compared to the $6,335 national average. Many public education supporters — from educators, to business leaders, to Superintendent of Public Instruction Delaine Eastin — have called for better funding for schools.

When the issue is school funding, however, two different questions quickly emerge. Are current funds adequate to the task at hand? And how efficiently are those funds being used? Answers to both questions are problematic, particularly generalized to California as a whole. (See Figure 9 for information about how school funds are allocated.)

The state and most districts do not collect school-by-school financial information. Thus it is nearly impossible to describe accurately how money is now spent in high schools specifically, let alone

FACILITY NEEDS EXPECTED TO INCREASE IN NEXT DECADE

To some degree, California has attempted to maximize its use of the "physical plant" by putting more students on its high school campuses. In urban areas this has led to an average high school size of 2,189 students. With accelerating growth in high school enrollments statewide, much of it in urban areas, high schools can expect to see continued population pressure on these already quite large facilities.

The traditional comprehensive California high school presents specific and very challenging site requirements. To adequately house 1,600 or more students, and to offer the full selection of diverse programs at a single site, requires extensive acreage and some very expensive facilities such as gymnasiums, performing arts centers, and science labs. This traditional program, particularly because of competitive sports, also makes the adoption of a year-round calendar difficult. Rethinking the configuration of high school — including the number of students, the program focus in a single school, and perhaps even the use of distance learning — could change the facility requirements.

EdSource 6/99

SOME RESOURCES USED IN THIS PUBLICATION

California Department of Education. (1999). *California Safe Schools Assessment: 1997-98 Results.* Sacramento, CA: Department of Education.

California Department of Education. (1998). *Getting Results: Developing Safe and Healthy Kids.* Sacramento, CA: Department of Education.

California Postsecondary Education Commission. (1996). *1996 Eligibility Study.* Sacramento, CA: California Postsecondary Education Commission.

Fetler, Mark. (1999). *High School Staff Characteristics and Mathematics Results.* Educational Policy Analysis Archives, v7n9: U.S. Department of Education.

Ingersoll, Richard M. (1999). *The Problem of Underqualified Teachers in American Secondary Schools.* Educational Researcher, v27n9, 1-12.

Rumberger, R.W., Larson, K.A., Ream, R.K., Palardy, G.J. (1999). *The Educational Consequences of Mobility for Students and Schools.* Berkeley, CA: Policy Analysis for California Education.

whether that money has made a difference in student performance. What is clear is that California high schools do not have the staffing, facilities, and student support programs they need to improve student performance. Similar shortfalls in technology and instructional materials are often noted as well. The reasons for these problems may lie both in the amount of funding available and in how the state and school districts currently allocate and spend the funds.

The heat is on for high schools

Standing on the threshold of the new millennium, California's public schools must raise their efforts — and their results — to a higher level. As the institutions that ultimately deliver K-12 students into the larger community, high schools in particular must respond to the demand for improved school and student performance.

The pressure on California's high schools is increasing. Yet the goals — and the paths for reaching them — are not yet well defined. High schools face rapidly changing and, at times, ambiguous expectations. Concurrently, they must understand and begin to work constructively with new accountability methods. The goal is better performance but the data by which performance can be measured are also incomplete.

Meanwhile, the needs of students and the resources available for addressing those needs have changed little. Many students do not arrive at school prepared to learn. Adequate staff capacity, funding, facilities, and student support services are vital to meaningful school improvement — and not currently available to California schools. However, adequate resources are not all that is needed to raise student achievement.

So what will it take for California high schools to respond to these growing pressures and help all students become successful adults? That question is waiting to be addressed in the months and years to come. The answers are neither simple nor quickly arrived at. The task will take constructive discussions, clear vision, a long-term commitment, and the recognition that this is a responsibility all Californians share. VE

REPORT

High Schools in the Hot Seat

Written by
Mary Perry

Researched by
Lisa Carlos
Barbara Miller
With
Aimee Madison

EdSource is an independent, impartial, statewide not-for-profit 501(c)(3) organization established in California in 1977.

EdSource develops and distributes accurate, balanced information about California's education policy and school improvement issues to wide and diverse audiences. Our goal is to develop an informed California citizenry in order to encourage thoughtful dialogue, increase participation, and enable informed decision making on behalf of California's public schools.

To learn more about our organization, to request an annual report, or to be placed on our general mailing list, please contact EdSource.

4151 Middlefield Rd.
Suite 100, Palo Alto, CA
94303-4743
650/857-9604
Fax 650/857-9618

e-mail:
edsource@edsource.org
or visit us on the web at
www.edsource.org

For data about specific schools and districts in California, visit the Education Data Partnership at **www.ed-data.k12.ca.us**

VE EdSource.

Clarifying Complex Education Issues

BEST COPY AVAILABLE